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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,396	10/24/2003	Jeffrey P. Snover	MS1-1740US	2522
22801	7590	01/17/2008		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER PHAM, CHRYSTINE	
			ART UNIT 2192	PAPER NUMBER
			MAIL DATE 01/17/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/693,396	Applicant(s) SNOVER ET AL.	
	Examiner Christine Pham	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 17, 2007 has been entered.
2. This action is responsive to the Amendments filed on September 17, 2007. Claims 1, 15, 16 and 23 have been amended. Claims 1-24 are presented for examination.

### ***Response to Arguments***

3. Applicant's arguments with respect to new claim limitation "executing the string ..." currently recited in independent claims 1, 15, 16 and 23 have been considered but are moot in view of the new ground(s) of rejection. See Goldman (US 2004/0006765 A1).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polonovski of record (US 2004/0153995 A1) in view of Goldman (US 2004/0006765 A1).

#### Claim 1

Polonovski teaches a computer readable storage medium having computer-executable instructions, the instructions comprising:

- receiving a string in an interactive environment (see at least 220, 205, 210 FIG.2 & associated text);
- identifying an attribution within the string (see at least paragraphs [0021], [0044]);
- identifying a construct associated with the attribution (see at least paragraphs [0023], [0044]); and
- saving information that correlates the attribution with the construct (see at least 220, 230 FIG.2 & associated text; paragraphs [0046]-[0055]; [0061]-[0063]).

Polonovski does not expressly disclose executing the string. However, Goldman teaches a visual programming environment (see at least FIG.2 & associated text) that enables the user to develop and modify the application interactively (i.e., executing the modification command/string) while the application runs (see at least paragraph [0017]). Goldman further teaches interactively identifying classes, methods, constructors and

parameters (i.e., "construct") associated with the modification (e.g., type editing) (see at least TABLE 2, paragraph [0035]). Goldman also teaches assigning the value to a variable (i.e., applying an identified constraint to an identified construct) as part of the dynamic, interactive modification (see at least paragraphs [0111]-[0112]). Polonovski and Goldman are analogous art because they are both directed to software development. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made to incorporate the teaching of Goldman into that of Polonovski for the inclusion of executing the string using the saved information that correlates the attribution with the construct. And the motivation for doing so would have been to eliminate the write-compile-execute cycle that routinely bogs down software development and enable first-time programmers to achieve early success without steep learning curve that typically precedes development in a traditional textual language (see at least Goldman paragraph [0017]).

#### Claim 2

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the attribution specifies a constraint for the construct (see at least FIG.3a & associated text).

#### Claim 3

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the construct comprises a variable, a structure, a function, or a script (see at least

paragraph [0072]).

#### Claim 4

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the information comprises metadata (see at least 220, 230, 225 FIG.2 & associated text).

#### Claim 5

The rejection of base claim 1 is incorporated. Polonovski further teaches applying the attribution to the construct when the construct is encountered interactively (see at least paragraphs [0080]-[0084]).

#### Claim 6

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the string comprises a command string entered in a command line environment (see at least FIS.3a-c & associated text; paragraph [0038]).

#### Claim 7

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the string comprises a portion of a script (see at least paragraph [0003]).

#### Claim 8

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein identifying the attribution comprises identifying a plurality of attributions associated with the construct (see at least paragraph [0061]).

#### Claim 9

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the attribution specifies a type for the construct (see at least paragraph [0058]).

#### Claim 10

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the attribution specifies applying intellisense to the construct to auto-complete the construct (see at least paragraph [0066]).

#### Claim 11

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the attribution specifies applying a predicate directive to the string that is operative to determine whether processing of the string continues (see at least paragraph [0058]).

#### Claim 12

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the attribution specifies applying a parsing directive that is operative to direct a manner for obtaining the construct (see at least paragraph [0058]).

#### Claim 13

The rejection of base claim 1 is incorporated. Polonovski further teaches wherein the attribution specifies a data generation directive that is operative to generate a set. of information that is stored in the construct (see at least paragraph [0063]).

#### Claims 14-21

Claims recite limitations, which have been addressed in claims 1-2, 5 and 10-14, therefore, are rejected for the same reasons as cited in claims 1-2, 5 and 10-14.

#### Claim 22

The rejection of base claim 15 is incorporated. Polonovski further teaches wherein the begin symbol comprises a left bracket and the end symbol comprises a right bracket (see at least paragraph [0067]).

#### Claim 23

Polonovski teaches a system the handles input parameters (see at least FIG.1 & associated text), the system comprising:

- a means for processing (see at least FIG.2 & associated text); and
- a memory means (see at least 22 FIG.1 & associated text paragraph [0038]), the memory means being allocated for a plurality of computer-executable instructions which are loaded into the memory means for execution by the means for

processing, the computer-executable instructions performing a method comprising: a means for receiving a string in an interactive environment; a means for performing the instructions addressed in claim 1.

Polonovski does not expressly disclose means for executing the string. However, as addressed in claim 1, Goldman teaches a visual programming environment (see at least FIG.2 & associated text) that enables the user to develop and modify the application interactively (i.e., executing the modification command/string) while the application runs (see at least paragraph [0017]). Goldman further teaches interactively identifying classes, methods, constructors and parameters (i.e., "construct") associated with the modification (e.g., type editing) (see at least TABLE 2, paragraph [0035]). Goldman also teaches assigning the value to a variable (i.e., applying an identified constraint to an identified construct) as part of the dynamic, interactive modification (see at least paragraphs [0111]-[0112]). Polonovski and Goldman are analogous art because they are both directed to software development. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made to incorporate the teaching of Goldman into that of Polonovski for the inclusion of executing the string using the saved information that correlates the attribution with the construct. And the motivation for doing so would have been the same as has been cited in claim 1.

#### Claim 24

Claim recites limitations, which have been addressed in claim 5, therefore, is rejected for the same reasons as cited in claim 5.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chrystine Pham whose telephone number is 571-272-3702. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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PRIMARY EXAMINER